

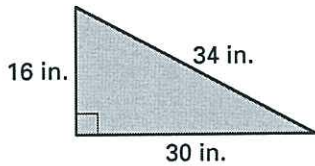
Name: _____ TP: _____

Failure to show work on all problems or use complete sentences will result in a LaSalle. Round to hundredths!

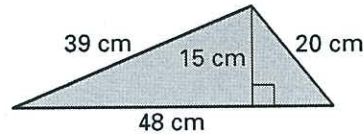
FORM A

1) Find the area and perimeter of the triangle below:

$$A = \frac{1}{2} b \cdot h$$



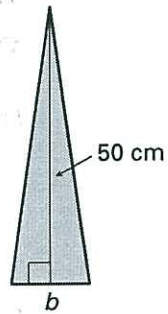
2) Find the area and perimeter of the triangle below:



3)

$$\text{Area} = 345 \text{ cm}^2$$

Find the base b .

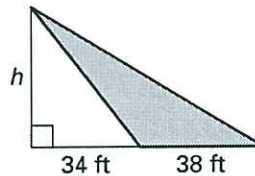


$$\begin{aligned} A &= \frac{1}{2} b h \\ 345 &= \frac{1}{2} b (50) \\ 345 &= \frac{25 b}{25} \\ 13.8 &= b \\ \boxed{b = 13.8 \text{ cm}} \end{aligned}$$

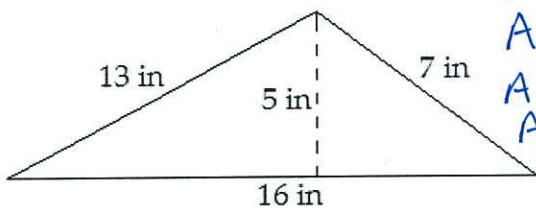
4)

$$\text{Area} = 826.5 \text{ ft}^2$$

Find the height h .



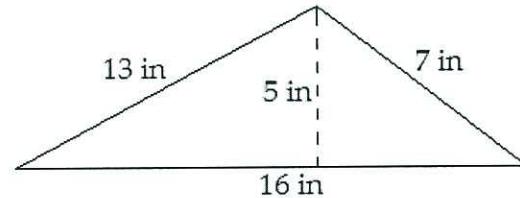
5) Find the area of the shape below.



$$\begin{aligned} A &= \frac{1}{2} b h \\ A &= \frac{1}{2} (16) (5) \\ A &= 8(5) \\ A &= 40 \text{ in}^2 \end{aligned}$$

A. 36 in^2 B. 56 in^2 C. 40 in^2 D. 80 in^2

6) Find the perimeter of the shape below.

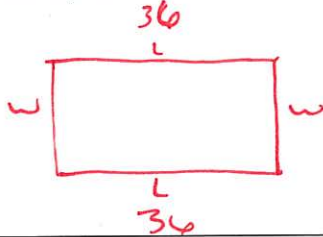


A. 41 in B. 36 in C. 40 in D. 35 in

7) Linoleum floor tiles are each 1-foot square. What is the minimum number of these tiles needed to tile the entire floor of a 13-foot-by-15-foot rectangular kitchen and a 6-foot-by-8-foot rectangular bathroom?

8) A square has area of 144 in^2 . Find the side length and perimeter of the square.

9) The width of a rectangle is a third of its length. If the length of the rectangle is 36 inches, what is a) the perimeter and b) the area?



10) Michelle is painting her bedroom walls neon pink. How many square feet will she paint if her bedroom is 20 feet by 12 feet?

Interim Review

11) What is the equation of the line that passes through (5,6) and is parallel to $y=5x-3$?

① Find new slope

② Find new y-intercept

③ Put it all together!

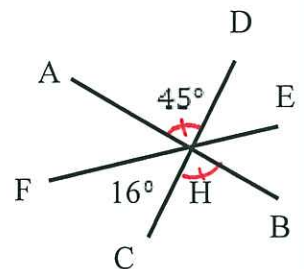
13) What values satisfy the inequality?

$$-3 + |x-4| = 6$$

- A. $\{-5, 13\}$
- B. $\{5, 13\}$
- C. $\{-5\}$
- D. $\{13\}$
- E. No Solution

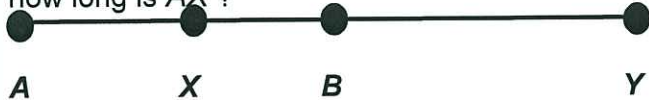
12) What is the equation of the line that passes through (3,4) and is perpendicular to $3x-y=8$?

4) Segments AB, CD, and EF intersect at H. What is the measure of angle EHB?



- A. 45°
- B. 29°
- C. 119°
- D. 61°
- E. 164°

5) If $AY = 50$, $BY = 7.5$, and X is the midpoint of AB, how long is AX?



- A. 22.25
- B. 21.25
- C. 20
- D. 42.5
- E. 26

LABEL WHAT you know!

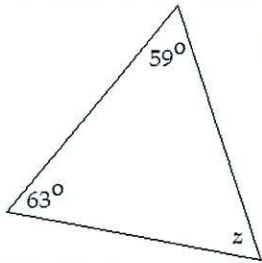
6) If your start position is at 0 on the number line and you move 10 places left then 4 places right and then 6 places left, what is your final position?

- A. 2
- B. 10
- C. -10
- D. -11
- E. -12

Name: _____ TP: _____

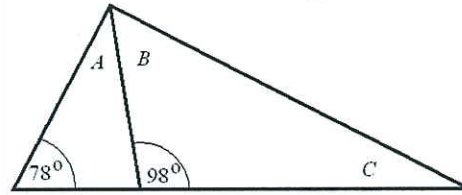
Failure to show work on all problems or use complete sentences will result in a LaSalle. Round to hundredths! FORM A

1) What is the value of z in the picture below?

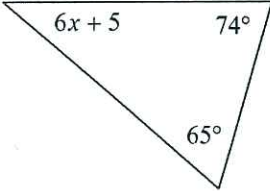


$$\begin{array}{r} 63 + 59 + z = 180 \\ 122 + z = 180 \\ -122 \quad -122 \\ \hline z = 58^\circ \end{array}$$

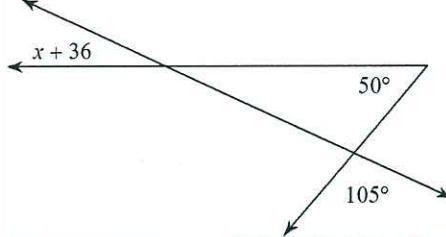
2) **Challenge:** Angle A has half the measure of angle B. Find the measure of angle C.



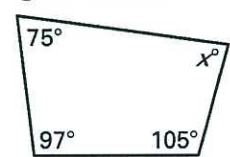
3) Solve for x :



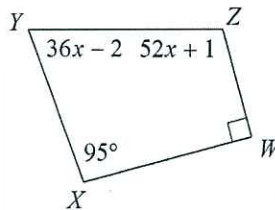
4) Solve for x :



5) Explain how you would find the value for x in the figure below:

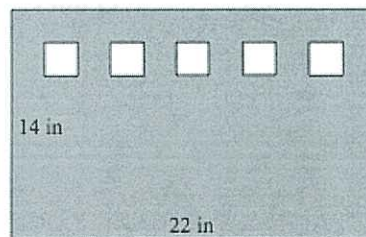


6) Find the given measure:
 $m\angle Z$



7) A small highway billboard has dimensions 14 ft tall and 48 ft wide. For an extra fee, advertisers can purchase a large billboard whose dimensions are twice those of the small billboard. In square feet, what is the area of the large billboard?

8) A rectangular piece of wood (shown below) has five, 2 inch by 2 inch squares cut out of it. What is the new area of the rectangular piece of wood in square inches?



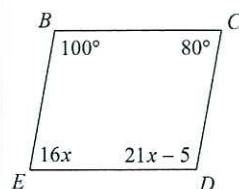
AREA OF WOOD
↳

AREA OF SQUARE HOLES:

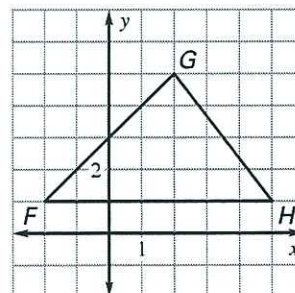
DIFFERENCE!

9) The area of a triangle is 578 cm^2 . Its base is four times the length of its height. Find the height and base of the triangle.

10) Find the given angle:
 $m\angle E$



11) Find the area of the figure below

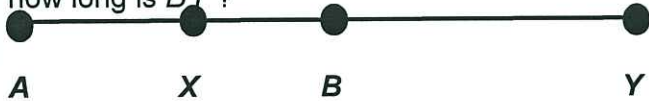


12) What is the equation of the line that passes through (8,4) and is perpendicular to $0.5=16y+4x$?

must be
in slope-
intercept
form!

13) Solve for x:
 $z=xy+16-z$

14) If $AY = 50$, $BX = 30$, and X is the midpoint of AB , how long is BY ?



15) On a number line, point A is located at -99 , B is located at -4 , and C is located at 62 . How much longer is BC than AB ?

16) Ms. Silva enjoys skateboarding. Her ramp requires that the starting point would have the coordinates of $(-2, -9)$ and the highest point on her ramp would have coordinates of $(12, 18)$. What would the slope of Ms. Silva's skateboard ramp be?

$$\frac{y_2 - y_1}{x_2 - x_1} \quad \begin{array}{l} \text{RISE (y's)} \\ \hline \text{RUN (x's)} \end{array}$$

17) On a number line, the coordinate of point A is 25 and the coordinate of point B is -5 . What is the coordinate of the midpoint of line segment AB ?

PUSH IT TO THE LIMIT.

Name: _____ TP: _____

Form A

Failure to show work on all problems or use complete sentences will result in a LaSalle. Round to hundredths!

- 1) A circle has a circumference of 18 ft. What is its area?

$$C = 2\pi r$$

$$A = \pi r^2$$

$$\frac{18}{2\pi} = \frac{2\pi r}{2\pi}$$

$$2.86 = r$$

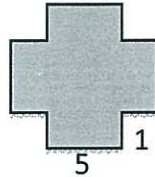
$$A = \pi (2.86)^2$$

$$A = \pi (8.207)$$

$$A = 25.78 \text{ ft}^2$$

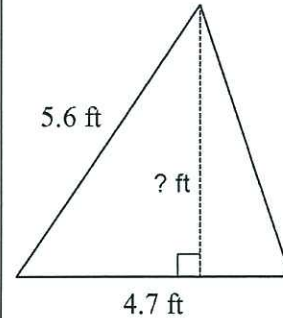
- A. 25.78 ft²
B. 103.13 ft²
C. 254.47 ft²
D. 1017.88 ft²

- 2) In the square below, 1 ft by 1 ft corners have been cut out. Find the perimeter and area of the remaining figure.



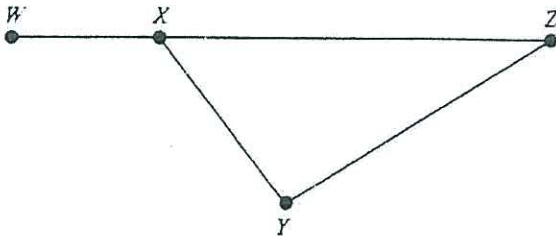
Perimeter: _____
Area: _____

- 3) Find the height in the triangle below:

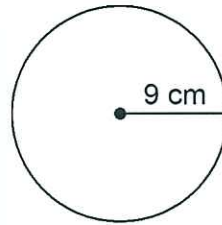


Area = 10.8 ft²

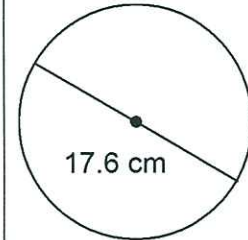
- 4) In the figure below, W, X, and Z are collinear. If the measure of angle Y is 87° and the measure of angle YXW is 128°, what is the measure of angle Z?



- 5) Find the area of the circle below:



- 6) Find the area of the circle below:



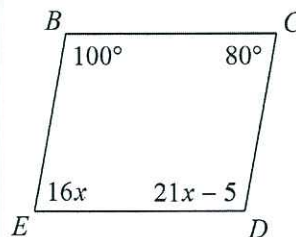
- 7) How many millimeters long is the diameter of a circle whose area is $49\pi \text{ mm}^2$?

- 8) Find the diameter of a circle if the area is 387.1 m^2 .

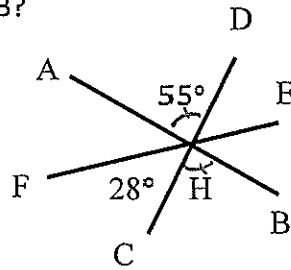
- 9) Find the radius of a circle if the area is 482.3 m^2 .

- 10) A farmer ties his goat to a stake in the ground outside of the barn to keep it from chewing on the fencing. When attached to the stake, the goat can eat grass that is 12 feet or less from the stake in any direction. If the farmer leaves the goat out all day and it eats every piece of grass it can reach, what is the area of lawn the goat destroyed? (draw a picture!)

- 11) Find the measure of Angle E:



12) Segments AB, CD, and EF intersect at H. What is the measure of 2 times angle EHB?



- A. 28°
- B. 55°
- C. 110°
- D. 180°
- E. 194°

13) Solve for x: $z(y+x)=12yz$

14) On a number line, point A is located at -23.5, point B is located at -.5, and C is located at 0. How much longer is AC than AB?

15) What is the equation of the line that passes through (2,-8) and is perpendicular to $y=3x-5$?

16) A turtle moves from his original point of rest, at (-6, -8) to his final position at (2,6). Where would the halfway point have been for his friend rabbit to meet him?

slope!

17) Describe the following angle relationships in terms of *congruent*, *supplementary*, or *neither*.

- a) Alternate interior angles
- b) Alternate exterior angles
- c) Corresponding angles
- d) Consecutive Interior angles
- e) Angles whose sum is 180 degrees
- f) Angles whose sum is 90 degrees

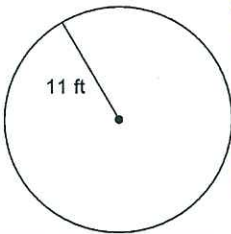
PUSH IT TO THE LIMIT.

Name: _____ TP: _____

FORM A

Failure to show work on all problems or use complete sentences will result in a LaSalle. Round to hundredths!

- 1) Find the circumference of the circle below:



$$C = 2\pi r$$

$$C = 2\pi(11)$$

$$C = 22\pi$$

$$C = 69.11\text{ ft}$$

- 2) Find the circumference of the circle below:



- 3) A car tire has a circumference of 64 inches. What is the diameter of the wheel? What is the radius?

- 4) The perimeter of a rectangle is 42 centimeters. The width of the rectangle is twice as long as its length. Find the length and width of the rectangle.

- 5) Linoleum floor tiles are each 1-foot square. What is the minimum number of these tiles needed to tile the entire floor of a 13-foot-by-15-foot rectangular kitchen and a 6-foot-by-8-foot rectangular bathroom?

- 6) Find the radius and diameter of a circle if the area is 359.7 yd². How many 1 foot by 1 foot tiles would be needed to cover both a floor that is 15 feet by 9 feet and a 4 foot by 8 foot long hallway?

- 7) A square has area of 169 in². Find the side length and perimeter of the square.

$$A = 169$$

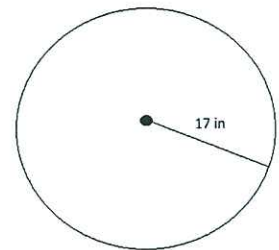
$$A = x^2$$

$$169 = x^2$$

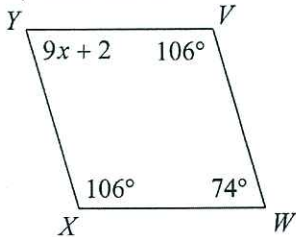
$$\sqrt{169} = \sqrt{x^2}$$

$$13 = x$$

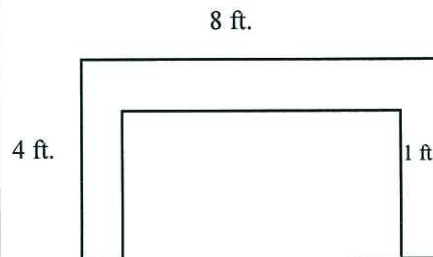
- 8) What is the circumference of the circle?



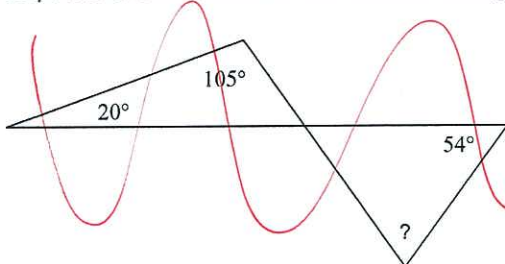
- 9) Solve for x:



- 10) A cut is made from the bottom of a 4 foot by 8 foot rectangle so that it leaves a 1 foot strip along the remaining sides as shown in the diagram below. What is the perimeter of the remaining portion of the rectangle?

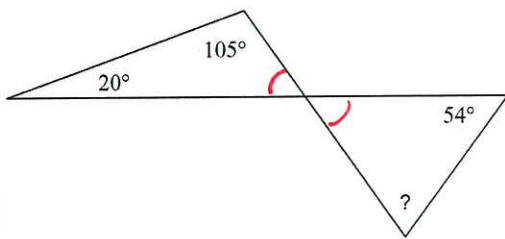


- 11) Find the measure of the indicated angle.



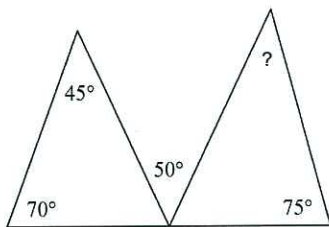
- 12) The area of a triangle is 120 ft.². The base of the triangle is 10 ft. long. What is the height of the triangle?

11) Find the measure of the indicated angle.

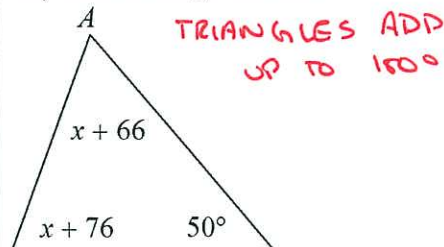


12) The area of a triangle is 120 ft.^2 . The base of the triangle is 10 ft. long. What is the height of the triangle?

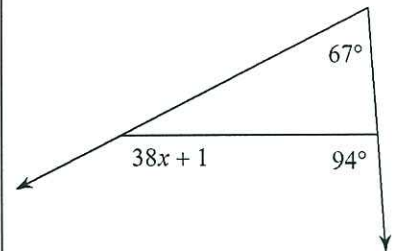
13) Find the measure of the indicated angle.



14) Find the angle measure A:

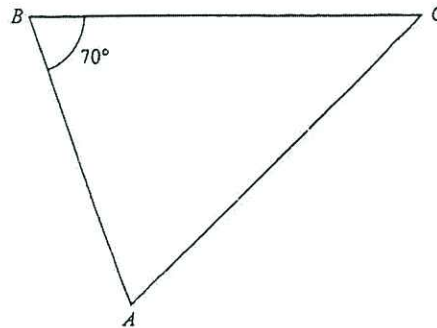


15) Solve for x:



16) Angle A of a triangle measures $(3x)$ degrees, angle B measures $(10x + 4)$ degrees, and angle C measures (x) degrees. What is the measure of angle A?

17) In triangle ABC below, the measure of angle B is 70 degrees, and the measure of angle A is half the measure of Angle B. What is the measure of angle C?



Interim Review

18) What is the solution set for the following inequality: $|2x - 8| < 14$

19) On a number line, you start at 0. Then, you move 6 units right, 14 units left, 8 units right, then 17 units left. What is your final position on the number line?

20) You begin walking downtown at the coordinates 8West and 12 North. You wind up at the coordinates 6 west and 14 North. If West was represented by positive movement along the x-axis, and North was represented by positive movement along the y-axis, What would be the midpoint between your original and final location?

21) Angles 1 and 2 are supplementary angles. The $m\angle 1 = x^\circ$ and $m\angle 2 = 3x - 8^\circ$. What is the measure of the larger angle?

PUSH IT TO THE LIMIT.